



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,715	08/18/2003	William Michael Steiner	24-NS-132937	4388

7590 03/02/2004

John S. Beulick  
Armstrong Teasdale LLP  
Suite 2600  
One Metropolitan Square  
St. Louis, MO 63102

EXAMINER

RICHARDSON, JOHN A

ART UNIT	PAPER NUMBER
----------	--------------

3641

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/642,715

Applicant(s)

STEINER ET AL.

Examiner

John Richardson

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08-18-03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Non Final Rejection***

1). The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2). The disclosure is objected to because of the following informalities:

- Specification, page 2, [0006], '**provides**' should read '**provided**'
- Figures 2-3, do not show **items 78 -HCU's-** described on pages 6, 8 of the Specification.

Appropriate correction is required.

Art Unit: 3641

3). Claims 1 to 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Steiner et al (U.S. 6,650,722).

The reference discloses a boiling water reactor (BWR) nuclear system for control rod actuation comprising a control rod drive system (RDCS-item 70), hydraulic control rod drive units (items 78), a control processor (item 72), a plurality of transponder cards (items 76) arranged in clusters as disclosed in Figure 3, said transponder cards controlled by branch amplifier cards (items 74) as shown in Figure 3, said branch amplifier cards receives and resends commands form the said processor (item 72) as described in Column 3, lines 32-53, a AC voltage downstream from the transponder cards as described in Column 4, lines 50-60, Column 6, lines 53-58, Column 8, lines 42-48, Column 10, lines 19-28, a transponder trouble information connected to said transponders, items 76, as described in Column 7, lines 23-43, relating to claims 2-3, 8-9, 14-15, the reference discloses the said branch amplifier cards, items 74, are configured to accept command words (CMD) upstream / downstream and in a reverse manner downstream / upstream (see Column 3, lines 33-61), and to compare / differentiate said command words (CMD) as stated in Column 4, lines 21-39, relating to claims 4-5, 10-11, 16-17, the reference discloses the means to receive and buffer said command (CMD) words as a single command address upstream of the said transponder cards, items 76 as stated in Column 4, lines 21-26, and relating to claims 6, 12, 18, the reference discloses that the acknowledge words (ACK) are configured to compare any signal from the said transponder cards (items 76) which are as shown in

Art Unit: 3641

Figure 3, downstream from the said amplifier cards (items 74) and in the manner described in Column 4, lines 21-45.

4). The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5). Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Richardson whose telephone number is (703) 305 0764. The examiner can normally be reached on Monday to Thursday from 7.00 AM to 4.30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306 4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 305 7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

John Richardson, PE,

February 24 2004.



MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER

Application/Control Number: 10/642,715

Page 5

Art Unit: 3641